Remarks

The Rejection of Claims 33-38 under 35 U.S.C. §112

The Examiner rejected Claim 33, and those depending therefrom, under 35 U.S.C. §112 as not being sufficiently enabled such that one having ordinary skill in the art could make and use the invention. More specifically, the Examiner indicated that Applicant's response to the Office Action of September 11, 2002 (Paper No. 9) did not contain an amendment to the claims or sufficient support in the specification for the invention of Claim 33. In Paper No. 9, the Examiner indicated that Claim 33, and those depending therefrom, were rejected under 35 U.S.C. §112 because the specification did not disclose an embodiment having two light sources and a set of detectors wherein the detectors were arranged by the structure as claimed.

Applicant respectfully submits that while not specifically discussing the rejection of Claims 33-38 under 35 USC §112, Applicant's response to Paper No. 9 added new Paragraph [0045] and new Figure 6, which fully addressed the rejection. Figure 6 illustrates all of the elements of the invention of Claim 33 and new Paragraph [0045] provides written support for the invention of Claim 33 such that one having ordinary skill in the art could make and use the invention without undue experimentation.

In view of Applicant's amendments to the drawings and specification, reconsideration of the rejection is courteously requested.

The Rejection of Claims 1, 3-4, 9-11, 29-34 and 39-43 under 35 U.S.C. §102

The Examiner rejected the above-identified claims under 35 U.S.C. §102 as being anticipated by one of U.S. Patent No. 5,796,112 (Ichie) and/or U.S. Patent No. 5,535,052 (Jörgens).

With regard to the rejection of Claims 1, 3-4 and 9-11 in view of Ichie, the Examiner asserts that Ichie discloses detectors for detecting both transmitted light and fluorescent light, wherein the transmitted light comprises fluorescent light emitted by the specimen, reflected by barrier filter 18, and back to detector 20a. Applicant appreciates the Examiner's characterization of transmitted light comprising that light passing through the specimen.

In view of the above, Applicant has amended Claim 1 to include the limitation that the transmitted light does not comprise the fluorescent light produced by the specimen.

With regard to the rejection of Claims 29-34 and 39-43 in view of Jörgens, Applicant has amended Claim 29 to specifically include the limitations that light source (1) is on a top side of the specimen and that additional light source (21) and detector (16) on the side facing away from the specimen are operatively arranged to simultaneously detect transmitted light and illuminate the specimen.

Jörgens discloses switchable mirror 25, which operates to prevent detector 29 and transmitted light illuminating device 28 from simultaneously detecting light and illuminating the specimen as required by amended Claim 29.

In view of the amendments to Claims 1 and 29, Applicant respectfully requests reconsideration of the rejections in view of Ichie and Jörgens.

The Rejection of Claims 5-8 under 35 U.S.C. §103

The Examiner rejected Claims 5-8 under 35 U.S.C. §103 as being obvious over Ichie in view of German Patent Document No. DE 42 806 (Kapitza). Applicant respectfully traverses the rejection inasmuch as the rejection may apply in view of the amendment of Claim 1.

Ichie relates to a fluorescent microscope for detecting fluorescence emanating from a specimen. The detectors disclosed by Ichie are not configured for detecting transmitted light, that is, that light not produced by the fluorescence of the specimen as required by amended Claim 1. Hence, because Ichie does not explicitly or implicitly disclose, teach, or suggest a microscope operatively arranged to detect both fluorescent and transmitted light, there is no motivation to combine his teachings with those of others to simultaneously detect transmitted and fluorescent light. In fact, because Ichie does not disclose the simultaneous detection of fluorescent and transmitted light, Ichie actually serves to teach away from the combination suggested by the Examiner. Hence, one having skill in the art would not have been motivated to combine the teachings of Ichie with those of Kapitza to create the invention of Claims 5-8.

Kapitza discloses a method and a device for obtaining fluorescent images of extended, large object fields. The images are produced with the aid of a laser scanning microscope. The light of an Argon-laser (1) is directed via a scanning device onto a sample (13). Where fluorescent light is to be detected, a filter element (15) is placed in front of the detector (27) to block the laser light. Thus, it

is seen that the invention described by Kapitza does not have the ability simultaneously detect both fluorescent and transmitted light.

Hence, the combination or modification suggested by the Examiner would not result in the microscope of the present invention since neither Ichie nor Kaptiza are capable of simultaneously detecting both fluorescent light and transmitted light, that is, light not comprising the fluorescent light produced by the specimen. Hence, Claims 5-8 are non-obvious in view of the teachings of Ichie and Kapitza.

In view of the fact that neither of Ichie nor Kapitza disclose, teach or suggest a microscope capable of simultaneously detecting fluorescent and transmitted light (that is, light not produced by the fluorescence of the specimen), there is no teaching suggestion or motivation contained either explicitly or implicitly to make the combination/modification proposed by the Examiner. Reconsideration of the rejection is, thus, courteously requested.

Conclusion

Applicant respectfully submits that the present application is now in condition for allowance, which action is courteously requested.

Respectfully submitted,

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